

# Hope Connections: First Look

9/12/2013



**H**ope Connections is a Mental Health Services Act—Innovations program that offers peer support and family engagement to clients and their families in three levels of care throughout San Diego County’s Behavioral Health Services (SDCBHS): 1) in the County’s Emergency Psychiatric Unit (EPU); 2) in the County Psychiatric Hospital (SDCPH) and; 3) in designated Outpatient (OP) clinics.

Hope Connections’ team of staff offer support to persons experiencing mental health challenges and/or their family members from the unique perspective of “someone who’s been there.”

Support staff offer referrals, side-by-side coaching, assistance with reintegration into the community, linking clients to appropriate mental health services, and help with navigating both behavioral health and primary health care systems.

Hope Connections began putting their support staff into the EPU, the SDCPH, and into the Outpatient clinics in the fall of 2011. This is a first look at the impact of the Hope Connections program on service utilization patterns for clients that engaged with Hope staff in the early months of the program (January 1, 2012—June 30th, 2012).

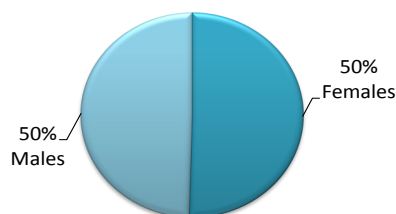
## Who engaged with Hope Connections support staff? (For more details see Appendix A.)

**Hope Enrolled:** There were 111 persons (56 females and 55 males) who engaged with Hope Connections support staff (up to 3-5 times) in the EPU, in SDCPH, and/or in designated OP clinics and chose to continue with the peer and/or family support by enrolling in the Hope Connections program between January 1st and June 30th, 2012. Persons with alcohol and/or drug challenges were not eligible and were referred to programs that could appropriately address their immediate needs.

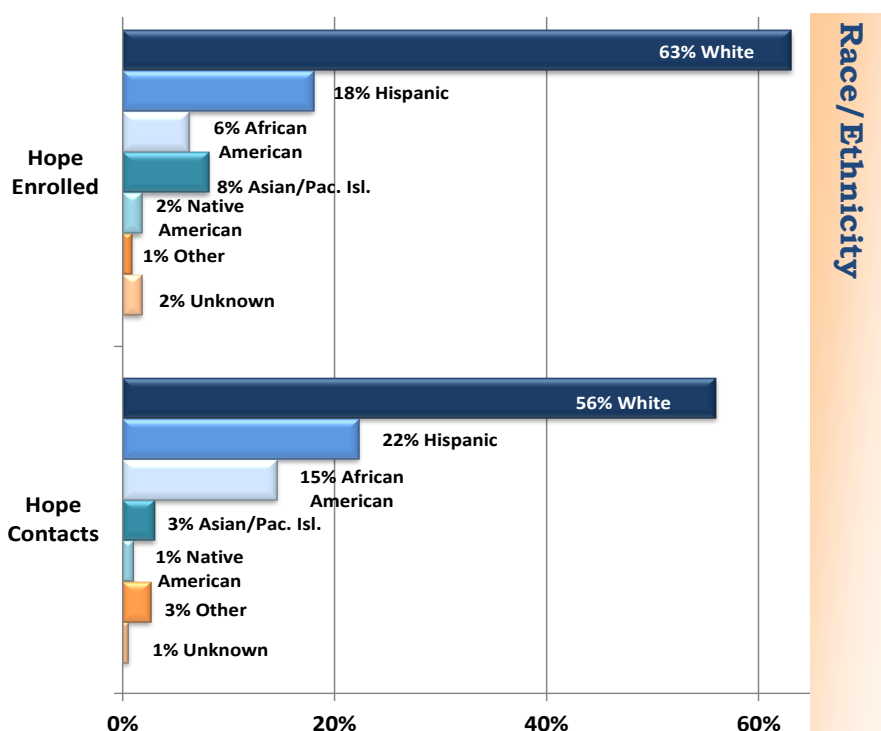
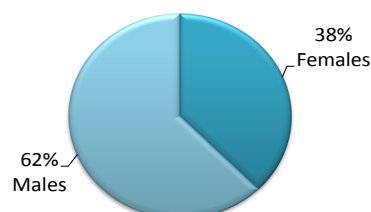
**Hope Contacts:** There were 881 persons (331 females and 549 males) who engaged with Hope Connections support staff (up to 3-5 times) in the EPU, in SDCPH, and/or in designated OP clinics between January 1st and June 30th, 2012, but did not enroll in the program for various reasons (such as, they received all the support they required or did not meet enrollment criteria due to immediate drug and/or alcohol challenges mentioned above).

### Gender

Hope Enrolled



Hope Contacts



## Changes in Service Utilization:

It was hypothesized that engagement with Hope Connections staff would assist clients in moving towards more appropriate usage of the health care system.

Utilization of services was assessed at two time points: 1) Pre-recruitment to Hope Connections; and 2) Post-enrollment/contact.\* Pre-recruitment was defined as services utilized in the 6-months prior to enrollment or contact with Hope Connections staff (including the contact day). Post enrollment was defined as services utilized in the 6-months after enrollment or contact with Hope Connections.\*\* It should be noted that differences in utilization rates at the Pre-enrollment/contact period are largely related to the enrollment criteria which excluded those with alcohol and drug enrollment issues and referred them to other appropriate programs. This resulted in a higher rate of ADS issues in the Contacts versus Enrolled group.

A reduction in EPU utilization was observed in both the Hope Contacts group and the Hope Enrolled group. The Hope Contacts went from 92% at pre\*\* to 33% at post—a 59% reduction in utilization of EPU services. The Hope Enrolled went from 86% at pre to 28% at post—a 58% difference. The apparent high pre-enrollment EPU utilization rates for both groups is due to the fact that, by design, enrollment or contact with Hope Connections often takes place at the EPU. Therefore, we are primarily interested in the relative reduction of EPU usage post-enrollment or contact.

A reduction was also observed when examining utilization of Psychiatric Emergency Response Team (PERT) services. The Hope Enrolled group went from 20% at pre to 6% at post—a difference of 14%. The Hope Contacts group went from 17% at pre to 12% at post—a 5% difference.

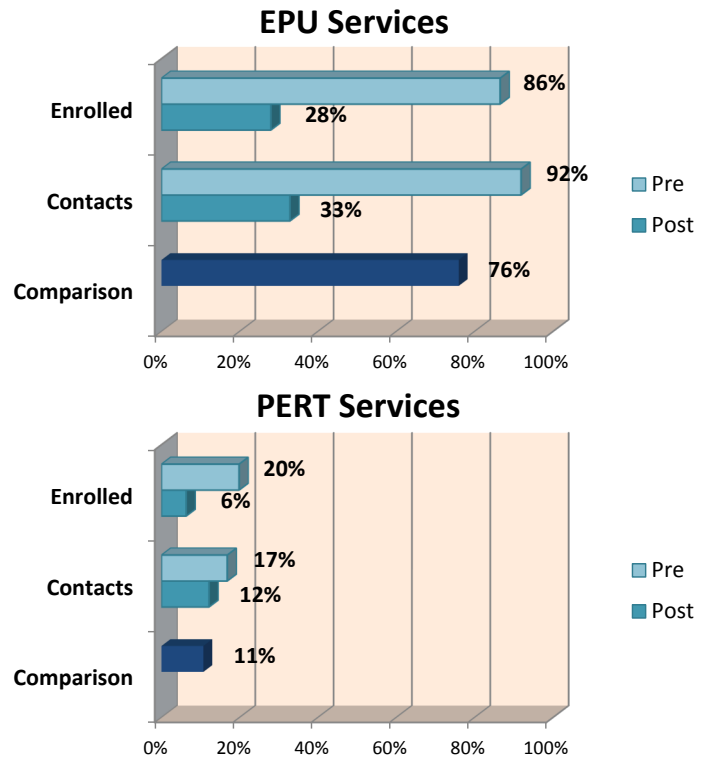
Increased utilization of Outpatient services was observed from pre to post for both the Hope Contacts and the Hope Enrolled groups. The Hope Enrolled group went from 28% at pre to 60% at post—a change of 32%. The Hope Contact group started at 25% at pre and increased to 40% at post—a 15% difference.

The use of Crisis Residential services also increased from pre to post for both the Hope Contacts and Hope Enrolled groups. The Hope Enrolled group started at 4% at pre and increased to 22% at post—an 18% change. The Hope Contacts group started at 8% at pre and increased to 18% at post—a 10% change.

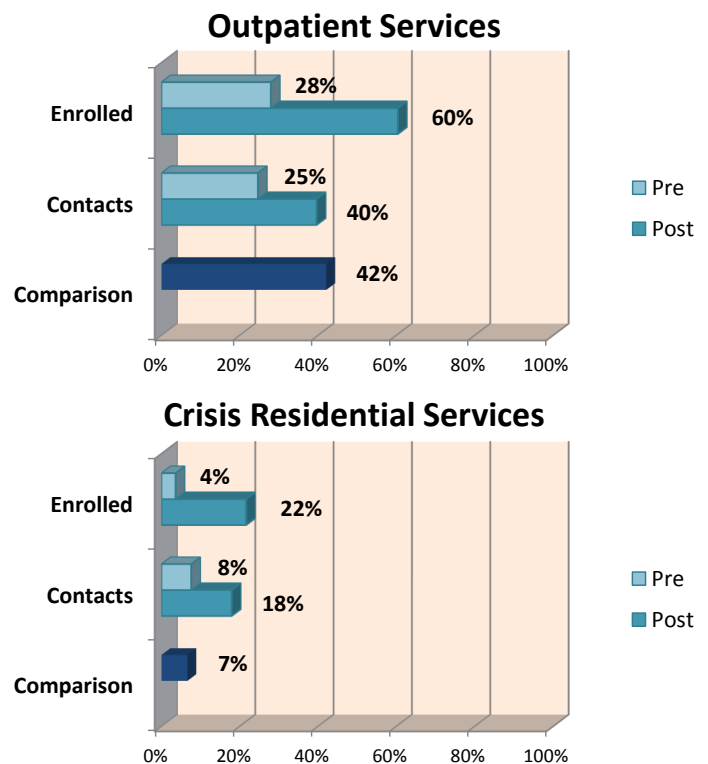
\*See Appendix B for data.

\*\*The Comparison group data was included in the graphs to the right to provide a sense of the service trends in the general population of SDCBHS. However, the Comparison group utilization covers the span of 1-full year, where the pre and post time points represent 6-month time periods (see Appendix A for more details about the 3 groups).

### Decreasing utilization trends...



### Increasing utilization trends...



# Inpatient Service Utilization & Hospital Re-Admissions:

Another decreasing trend in service utilization was observed regarding inpatient hospital stays.

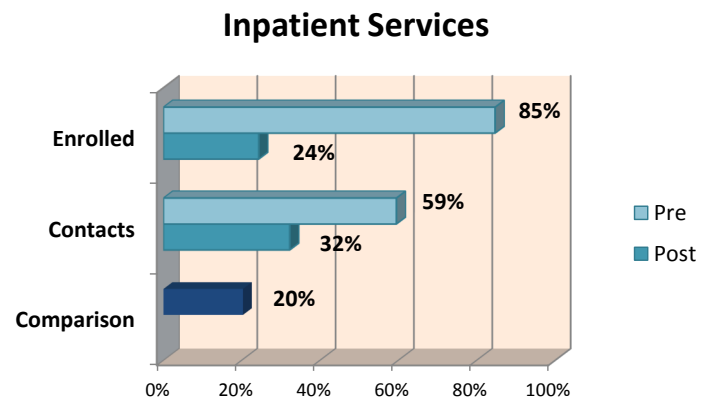
Utilization of inpatient hospital services for the Hope Enrolled group went from 85% in the pre enrollment period to 24% post enrollment—a decrease of 61%.\*

The Hope Contact group went from 59% at pre to 32% at post—a decrease of 27%.

Usage of inpatient hospital services seen in the general SDCBHS population as represented by the Comparison group was 20%.

\*If recruitment to Hope Connections occurred during an inpatient hospital visit, it was include in 'pre.'

## Changes in Inpatient Service Utilization...



## Did Hope Connections influence hospital re-admission rates?

Additional analyses were performed to assess how engagement with Hope Connections influenced hospital re-admission rates. For these analyses, of interest were only the hospital admissions and re-admissions that occurred during and after engagement with Hope Connections staff. Because this is a different research question, the number of hospital admissions is slightly different from general inpatient service utilization calculations presented above. Here a hospital stay was counted as a hospitalization if the date of discharge was on or after the first date of engagement with Hope Connections. A hospital re-admission was defined as a re-entry into the hospital within 30 days of discharge from a previous hospitalization.

Among all hospital re-admissions, the Hope Enrolled group had a lower proportion of re-admissions than Hope Contacts (19% vs. 25%, respectively). However, when hospital admissions for unduplicated clients are examined, there was a similar rate of re-admissions between Hope Enrolled and Contacts (19% vs. 20%, respectively). This lower rate of re-hospitalization visits per client (versus a lower rate of re-hospitalized clients overall), may be an indication that through the unique services offered by Hope Connections, such as linkages, referrals, and peer coaching, Hope Connections is having an impact on reducing utilization for those clients who are frequent users of Inpatient services and who experience higher numbers

of re-hospitalizations. It is also possible that the Hope Connections enrolled group is experiencing a lower proportion of re-hospitalization visits due to the nature of the enrollment criteria, which refers those with alcohol or drug related issues to other programs, and therefore would select out for a less 'severe' group.

Hospital Re-Admissions*	Total Number of Clients	Total Number of Hospitalizations	Total Number of Hospital Re-Admissions	% of Hospital Re-Admissions
Hope Enrolled	111	126	24	19%
Hope Contacts	881	1,000	251	25%
Comparison	9,632	3,329	782	23%

\* NOTE: The data in this table show the number of total admissions/re-admissions and may contain multiple admissions for some clients.

Unduplicated Client Re-Admissions	Total Number of Clients	Total Number of Clients Hospitalized	Total Number of Clients Re-Admitted	% of Clients Re-Admitted
Hope Enrolled	111	88	17	19%
Hope Contacts	881	595	120	20%
Comparison	9,632	1,987	393	20%

## Summary of Findings:

### The Hope Enrolled clients were...

- Slightly younger than the Comparison group (19% 18-24 year-olds).
- 50% male and 50% female—which was more evenly split with regard to gender than the Hope Contacted or Comparison groups (less predominantly male).
- Less likely to be African American and more likely to be White.
- More educated than the other groups.
- More likely to have a diagnosis of Schizophrenia, Bipolar Disorder, or Major Depressive Disorders than the Comparison group and higher proportions of Major Depressive Disorders and Bipolar Disorders than the Hope Contacts group.
- More likely to be seeking a competitive job and far less likely to report not being in the labor force than clients in the other two groups.

### and...

- Had the lowest hospital re-admission rate (19%) among all 3 groups.
- Had a 32% increase in use of Outpatient services from pre to post-enrollment.
- Had an 18% increase in use of Crisis Residential service from pre to post-enrollment.
- Had a 58% decrease in use of EPU services from pre to post-enrollment.
- Had a 14% decrease in use of PERT services from pre to post-enrollment.
- Had a 61% decrease in use of Inpatient services from pre to post-enrollment.



### The Hope Contacts clients were:

- Slightly younger than the Comparison group (more 18-24 year-olds).
- More likely to be male (62% males).
- More likely to be Hispanic and African American than either the Hope Enrolled group or the Comparison group.
- More likely to have been diagnosed with Schizophrenia and Schizoaffective Disorders.
- More likely to be homeless.

### and...

- Had an 15% increase in use of Outpatient services from pre to post-contact.
- Had a 10% increase in use of Crisis Residential services from pre to post-contact.
- Had a 59% decrease in use of EPU services from pre to post contact.
- Had a 5% decrease in use of PERT services from pre to post contact.
- Had a 27% decrease in use of Inpatient Hospital services from pre to post-contact.

***The first look at the impact of the Hope Connections Program on client service utilization patterns is promising, although more data is necessary to make any conclusive arguments. The data revealed that the side-by-side coaching, referral services, and assistance in navigating the health care system that Hope Connections support staff provide may indeed be helpful in shifting clients' mode of service utilization from a crisis-based mode to a more recovery-based method, which may be more beneficial for stabilization of symptoms and recovery.***



## Appendix A: Group Descriptions and Demographics

**Hope Enrolled:** These were clients who were contacted while in the EPU, in SDCPH, or designated Outpatient clinics and subsequently enrolled as a client in the Hope Connections program during the 6-month window spanning January 1st—June 30th, 2012. Persons with alcohol and/or drug challenges were not eligible and were referred to programs that could appropriately address their immediate needs.

**Hope Contacts:** These were clients who were contacted by Hope Connections staff either while in the EPU, in SDCPH, or designated Outpatient clinics—but either received all the necessary support/referrals that they needed at the time, declined enrollment, or were screened out (and were referred to other more appropriate programs) due to current alcohol and/or drug problems during the 6 month win-

dow spanning January 1st—June 30th, 2012.

**Comparison group:** In order to compare variables of interest to the general population of SDCBHS a comparison group was created. This group was formulated with the goal of finding clients who were eligible to be contacted by Hope Connections but were not. Because the program aims to contact 100% of EPU clients, it was impossible to create a valid comparison group without going back in time before the Hope Connections (and Bridges to Recovery) peer programs were in existence. Therefore, a comparison sample was created by simulating pathways to enrollment/contact for Hope Connections' clients but in a period of time before Hope Connections was active (March 1st, 2009—February 28, 2010).

### Demographics

	HOPE Enrolled (N = 111)	HOPE Contacts (N = 881)	Comparison (N = 9,632)		HOPE Enrolled (N = 111)	HOPE Contacts (N = 881)	Comparison (N = 9,632)
Age***	%	%	%	Diagnosis	% **	% **	% **
Age <18-24	19%	17%	13%	Schizophrenia and Schizoaffective	26%	27%	19%
Age 25-59	78%	79%	80%	Bipolar Disorders	20%	17%	15%
Age 60+	3%	5%	6%	Major Depression Disorders	33%	24%	20%
Gender	%	%	%	Other Psychotic Disorders	11%	11%	10%
Females	50%	38%	47%	Other Depression / Adjustment	5%	11%	22%
Males	50%	62%	53%	Anxiety Disorders	5%	3%	5%
Other / Unknown	0%	0%	0%	Substance Use Disorders	0%	7%	9%
Preferred Language	%	%	%	Cognitive / Personality Disorders	0%	0%	1%
English	93%	94%	91%	Other / Unknown			
Spanish	2%	4%	6%	Substance Use Diagnosis	%	%	%
Tagalog	1%	0%	0%	Any Substance Use Disorder	51%	74%	54%
Vietnamese	1%	0%	0%	No Substance Use Disorder	49%	26%	46%
Other Asian	0%	0%	0%	Insurance Status	%	%	%
Arabic	1%	0%	1%	Uninsured / Unknown	76%	67%	57%
Other Middle Eastern	0%	0%	0%	Medi-Cal Only	23%	25%	26%
Other / Unknown	3%	1%	1%	Medi-Cal + Medicare	1%	4%	13%
Race / Ethnicity	%	%	%	Medicare Only	0%	1%	1%
White	63%	56%	58%	Private	1%	2%	3%
Hispanic	18%	22%	20%	Living Situation	% **	% **	% **
African American	6%	15%	13%	Lives Independently	72%	58%	73%
Asian / Pacific Islander	8%	3%	4%	Board & Care	3%	5%	7%
Native American	2%	1%	1%	Justice Related	0%	0%	1%
Other	1%	3%	3%	Homeless	25%	35%	18%
Unknown	2%	1%	1%	Institutional	1%	2%	1%
Education Level	% **	% **	% **	Employment Status	% *	% *	% *
High School Diploma / GED	37%	43%	42%	Competitive Job	13%	11%	13%
Some College / Vocational Training	16%	12%	10%	Seeking Work	37%	16%	10%
Associates Degree	10%	10%	12%	Not in Labor Force	10%	42%	52%
Bachelors Degree	16%	8%	9%	Not Seeking Work	27%	22%	17%
Masters Degree	4%	1%	2%	Resident / Inmate of Institution	1%	1%	1%
Doctoral Degree	0%	0%	0%	Other	11%	5%	7%
High School Not Completed	18%	26%	24%	Unknown			

\*Percentages exclude Unknown values.

\*\*Percentages exclude Other/Unknown/Not Reported values.

\*\*\*Age for HOPE Enrolled and HOPE Contacts was of 4/1/2012. Age for Comparison as of 9/1/2009.

Hope Connections: First Look 9/12/2013

Data Sources: Anasazi download date: 4/2013.

Source: HSRC (MM, ST, BL, ZX)

Appendix A

## Appendix B: Service Utilization

### Hope Enrolled

Services Provided	Total Clients Pre: 111				Total Clients Post: 111			
	PRE				POST			
	Total Visits	Total Clients	Percent Users	Mean Visits Among Users	Total Visits	Total Clients	Percent Users	Mean Visits Among Users
<b>Outpatient Services</b>								
Case Management	3	1	1%	3.0	32	1	1%	32.0
Outpatient Programs	215	31	28%	6.9	581	67	60%	8.7
Fee for Service	51	2	2%	25.5	84	6	5%	14.0
*FSP Plus	60	1	1%	60.0	177	7	6%	25.3
FSP	89	4	4%	22.3	294	10	9%	29.4
<b>Emergency Services</b>								
EPU	131	96	86%	1.4	49	31	28%	1.6
PERT	26	22	20%	1.2	11	7	6%	1.6
<b>24 hour Services</b>								
Crisis Residential	53	4	4%	13.3	313	24	22%	13.0
<b>Inpatient Services</b>								
	Total	Percent Users	Mean (Admissions or Days) Among Users	Mean Days Per Admission	Total	Percent Users	Mean (Admissions or Days) Among Users	Mean Days Per Admission
Hospital Admissions	124		1.3		40		1.5	
Hospital Days	1,054		11.2	8.5	319		11.8	8.0
Number of Unique Clients	94	85%			27	24%		

### Hope Contacts

Services Provided	Total Clients Pre: 881				Total Clients Post: 881			
	PRE				POST			
	Total Visits	Total Clients	Percent Users	Mean Visits Among Users	Total Visits	Total Clients	Percent Users	Mean Visits Among Users
<b>Outpatient Services</b>								
Case Management	106	10	1%	10.6	157	19	2%	8.3
Outpatient Programs	1,433	217	25%	6.6	2,668	349	40%	7.6
Fee for Service	442	51	6%	8.7	729	73	8%	10.0
*FSP Plus	75	2	0%	37.5	445	15	2%	29.7
FSP	95	19	2%	5.0	1,076	85	10%	12.7
<b>Emergency Services</b>								
EPU	1,189	809	92%	1.5	695	289	33%	2.4
PERT	197	148	17%	1.3	141	107	12%	1.3
<b>24 hour Services</b>								
Crisis Residential	961	67	8%	14.3	2,144	158	18%	13.6
<b>Inpatient Services</b>								
	Total	Percent Users	Mean (Admissions or Days) Among Users	Mean Days Per Admission	Total	Percent Users	Mean (Admissions or Days) Among Users	Mean Days Per Admission
Hospital Admissions	781		1.5		557		2.0	
Hospital Days	5,417		10.3	6.9	3,174		11.2	5.7
Number of Unique Clients	524	59%			284	32%		

\*FSP Plus designation represents programs that have MHSA Housing funding.

HEALTH SERVICES RESEARCH CENTER is a non-profit research organization within the University of California, San Diego Department of Family and Preventive Medicine. HSRC works in collaboration with the Performance Outcomes and Quality Improvement Unit of SDCBHS to evaluate and improve mental health outcomes for County residents. Our research team specializes in the measurement, collection and analysis of health outcomes data to help improve health care delivery systems and, ultimately, to improve participant quality of life. For more information about HSRC please contact Steven Tally, PhD at 858-622-1771.

